IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1-3.   (Canceled)

4.   (Currently Amended) A method, ~~for selectively allocating or deallocating bandwidth between a first media aggregation manager and a second media aggregation manager, the method~~ comprising:

displaying, via a graphical user interface (GUI) at a computing device, ~~first~~ a graphical representation[[s]] of a network including a [[the]] first media aggregation manager and [[the]] a second media aggregation manager, wherein the first and second media aggregation managers are configured to:

establish a single reservation protocol session that reserves bandwidth from a plurality of routers along a first of a plurality of paths between the first and second media aggregation managers;

allocate the reserved bandwidth among a plurality of application sessions, each of which is between one of a first plurality of communication devices coupled to the first media aggregation manager and one of a second plurality of communication devices coupled to the second media aggregation manager ~~capable of serving as reservation session aggregation points on behalf of a first user community and a second user community, respectively, the first user community and the second user community coupled by a plurality of physical paths~~;

the computing device displaying, via the GUI, a first projected link utilization ~~schedule in response to a first request to analyze the effect of conveying media packets between the first user community and the second user community over a first path of the plurality of physical paths, the first projected link utilization schedule~~ illustrating predicted bandwidth usage for ~~one or more~~ the plurality of routers ~~associated with~~ along the first path; and

~~displaying a second projected link utilization schedule in response to a second request to analyze the effect of conveying media packets between the first user community and the second user community over a second path of the plurality of physical paths, the second projected link utilization schedule illustrating predicted bandwidth usage for one or more routers associated with the second path; and~~

in response to receiving input via the GUI selecting the first projected link utilization, the computing device instructing ~~displaying second graphical representations for allocating and/or deallocating bandwidth between~~ the first and second media aggregation manager<u>s</u> ~~and the second media aggregation manager~~ to establish the single reservation protocol session by reserving bandwidth from each of the plurality of routers along the first path ~~based on said displayed first projected link utilization schedule and said displayed second projected link utilization schedule~~.

5. (Currently Amended) The method of claim 4, <u>wherein the established reservation protocol session is a resource reservation protocol (RSVP) session</u> ~~further comprising overlaying a selected path of the plurality of physical paths onto existing bandwidth allocations to determine a projected link utilization associated with the selected path~~.

6-23. (Canceled)

24.   (Currently Amended) A machine-readable storage medium having stored thereon ~~data representing sequences of~~ instructions that, if ~~which, when~~ executed by a ~~processor~~ computing device, cause the ~~processor~~ computing device to perform a method comprising:[[;]]

displayi~~ng, via a graphical user interface (GUI), a~~ ~~first~~ graphical representation[[s]] of a network including a first media aggregation manager and a second media aggregation manager, wherein the first and second media aggregation managers are configured to:

establish a single reservation protocol session that reserves bandwidth from a plurality of routers along a first of a plurality of paths between the first and second media aggregation managers;

allocate the reserved bandwidth among a plurality of application sessions, each of which is between one of a first plurality of communication devices coupled to the first media aggregation manager and one of a second plurality of communication devices coupled to the second media aggregation manager ~~capable of serving as reservation session aggregation points on behalf of a first user community and a second user community, respectively, the first user community and the second user community coupled by a plurality of physical paths;~~

displayi~~ng, via the GUI,~~ a first projected link utilization ~~schedule in response to a first request to analyze the effect of conveying media packets between the first user community and the second user community over a first path of the plurality of physical paths, the first projected link utilization schedule~~ illustrating predicted bandwidth usage for ~~one or more~~ the plurality of routers ~~associated with~~ along the first path; and

~~display a second projected link utilization schedule in response to a second request to analyze the effect of conveying media packets between the first user community and the second user community over a second path of the plurality of physical paths, the second projected link utilization schedule illustrating predicted bandwidth usage for one or more routers associated with the second path; and~~

in response to receiving input via the GUI selecting the first projected link utilization, instructing ~~display second graphical representations for allocating and/or~~

~~deallocating bandwidth between~~ the first and second media aggregation manager~~s~~ ~~and second media aggregation manager~~ to establish the single reservation protocol session by reserving bandwidth from each of the plurality of routers along the first path ~~based on said first projected link utilization schedule and said second projected link utilization schedule~~.

25.   (Currently Amended) The machine-readable storage medium of claim 24, wherein the established reservation protocol session is a resource reservation protocol (RSVP) session ~~further comprising instructions to overlay a selected path of the plurality of physical paths onto existing bandwidth allocations to determine a projected link utilization associated with the selected path~~.

26-71. (Canceled)

72.   (Currently Amended) The method of claim 4, wherein the first projected link utilization is determined based on a predicted number of users of the first and second pluralities of communication devices utilizing the established reservation protocol session ~~said displaying a first projected link utilization and displaying a second link utilization comprises displaying the first path and the second path prioritized based upon one or more predetermined factors~~.

73.   (Currently Amended) The method of claim 4[[72]], further comprising displaying, via the GUI, a second projected link utilization illustrating predicted bandwidth usage for a plurality of routers along a second path, and wherein the second projected link utilization indicates that the predicted bandwidth usage along the second path exceeds available bandwidth along the second path ~~wherein one or more predetermined factors include one or more of;~~

> ~~a number of nodes in the first path or the second path;~~
> ~~total available bandwidth for the first path or the second path;~~
> ~~available communications bandwidth on the first path or the second path;~~
> ~~propagation speed between nodes that make up the first path or the path; and~~
> ~~physical length of travel between nodes that make up the first path or the second~~

~~path~~.

74.   (Currently Amended) The machine-readable storage medium of claim 24, wherein the method further includes displaying one or more additional projected link utilizations illustrating predicted bandwidth for a plurality of additional routers along one or more others of the plurality of paths, ~~said instructions further cause said processor to display said first link utilization schedule and said second link utilization schedule of the first path and the second path~~ wherein the first projected link utilization and the one or more additional projected link utilizations are displayed in a prioritized order ~~fashion~~ based upon one or more ~~predetermined~~ factors.

75.   (Currently Amended) The machine-readable storage medium of claim 74, wherein the one or more ~~predetermined~~ factors include one or more of the following:[[;]]

> a number of nodes in a path;
> total available bandwidth for a path;
> available communications bandwidth on a path;
> propagation speed between nodes that make up a path; or ~~and~~
> physical length of travel between nodes that make up a path.

76.   (Currently Amended) A method, ~~for selectively allocating or deallocating bandwidth between a first network device and a second network device, the method~~ comprising:

displaying, via a graphical user interface (GUI) at a computing device, a ~~first~~ representation[[s]] of a network including a [[the]] first network device and [[the]] a second network device, wherein the first and second network devices are configured to:

establish a single reservation protocol session that reserves bandwidth from a plurality of routers along a first of a plurality of paths between the first and second network devices;

allocate the reserved bandwidth among a plurality of application sessions, each of which is between one of a first plurality of communication devices coupled to the first network device and one of a second plurality of communication devices coupled to the second network device ~~capable of serving as reservation session aggregation points on behalf of a first group of terminals and a second group of terminals respectively, the first group of terminals and the second group of terminals coupled by a plurality of physical paths~~;

the computing device displaying, via the GUI, a first projected link utilization ~~schedule in response to a first request to analyze the effect of conveying media packets between the first group of terminals and the second first group of terminals over a first path of the plurality of physical path, the first projected link utilization schedule~~ illustrating predicted bandwidth usage for ~~one or more~~ the plurality of routers ~~associated with~~ along the first path; and

~~displaying a second projected link utilization schedule in response to a second request to analyze the effect of conveying media packets between the first group of terminals and the second group of terminals over a second path of the plurality of physical path, wherein the second projected link utilization schedule illustrating predicted bandwidth usage for one or more routers associated with the second path; and~~

in response to receiving input via the GUI selecting the first projected link utilization, the computing device instructing ~~displaying second graphical representations for allocating and/or deallocating bandwidth between~~ the first and second network devices to establish the single reservation protocol session by reserving bandwidth from

each of the plurality of routers along the first path ~~and second network device based on said displayed first projected link utilization schedule and said displayed second projected link utilization schedule~~.

77.   (Currently Amended) The method of claim 76, wherein the established reservation protocol session is a resource reservation protocol (RSVP) session ~~further comprising overlaying a selected path of the plurality of physical paths onto existing bandwidth allocations to determine a projected link utilization associated with the selected path~~.

78.   (Currently Amended) The method of claim 76, further comprising:
       after the reservation protocol session has been established, receiving additional input via the GUI requesting that the established reservation protocol session be de-allocated; and
       in response to receiving the additional input, instructing the first and second network devices to de-allocate the established reservation protocol session ~~wherein said displaying a first projected link utilization and displaying a second link utilization comprises displaying the first path and the second path prioritized based upon one or more predetermined factors~~.

79.   (Currently Amended) The method of claim 76[[78]], wherein the first projected link utilization is determined based on a predicted number of users of the first and second pluralities of communication devices ~~the established reservation protocol session one or more predetermined factors include one or more of;~~
       ~~a number of nodes in the first path or the second path;~~
       ~~total available bandwidth for the first path or the second path;~~
       ~~available communications bandwidth on the first path or the second path;~~
       ~~propagation speed between nodes that make up the first path or the second path;~~
~~and~~
       ~~physical length of travel between nodes that make up the first path or the second path~~.

80-83. (Canceled)

84.   (Currently Amended) A machine-readable storage medium having stored thereon instructions that, if executed by a computing device, cause the computing device to perform a ~~method for selectively allocating or deallocating bandwidth between a first network device and a second network device, the~~ method comprising;

displaying, via a graphical user interface, a ~~first~~ graphical representation[[s]] of ~~the~~ a network including a first network device at an edge of a first local area network and a second network device at an edge of a second local area network, wherein the first local area network includes ~~on which~~ a first set of terminals running[[s]] a first set of local applications ~~on behalf of which the first network device is configured to act as a signaling and control proxy and the second network device at an edge of a second local area network on which,~~ wherein the second local area network includes a second set of terminals running[[s]] a second set of local applications, wherein the first set of terminals is coupled to the second set of terminals via a plurality of paths including a first path, and wherein the first and second networking devices are configured to:

act as a signaling and control proxy for the first and second local area networks, respectively;

serve as reservation session aggregation points on behalf of the first and second sets of terminals, respectively ~~on behalf of which the second network device is configured to act as a signaling and control proxy, the first and second network devices capable of serving as reservation session aggregation points on behalf of a the first set of terminals and the second set of terminals, respectively, the first set of terminals and the second set of terminals coupled by a plurality of physical paths;~~

displaying, via the GUI, a first projected link utilization ~~schedule in response to a first request to analyze the effect of conveying media packets between the first set of terminals and the second set of terminals over a first path of the plurality of physical paths, the first projected link utilization schedule~~ illustrating predicted bandwidth usage for ~~one or more~~ a plurality of routers ~~associated with~~ along the first path; and

displaying a second projected link utilization schedule in response to a second request to analyze the effect of conveying media packets between the first set of terminals and the second set of terminals over a second path of the plurality of physical paths, the second projected link utilization schedule illustrating predicted bandwidth usage for one or more routers associated with the second path; and

in response to receiving input via the GUI selecting the first projected link utilization, instructing allocating and/or deallocating bandwidth between the first and second network devices and second network device to establish a single reservation protocol session by reserving bandwidth from each of the plurality of routers along the first path based on said displayed first projected link utilization schedule and said displayed second projected link utilization schedule, wherein said allocating and/or deallocating is performed in response to user input.

85.   (Currently Amended) The method machine-readable storage medium of claim 84, wherein the established reservation protocol session is a resource reservation protocol (RSVP) session further comprising overlaying a selected path of the plurality of physical paths onto existing bandwidth allocations to determine a projected link utilization associated with the selected path.

86.   (Currently Amended) The method machine-readable storage medium of claim 84, wherein the method further includes displaying, via the GUI, a second projected link utilization illustrating predicted bandwidth usage for a plurality of routers along a second of the plurality of physical paths said displaying a first projected link utilization and displaying a second link utilization comprises displaying the first path and the second path prioritized based upon one or more predetermined factors.

87.   (Currently Amended) The ~~method~~ <u>machine-readable storage medium</u> of claim 86, <u>wherein the first and second projected link utilizations are displayed in a prioritized order based on one or more of the following factors:</u> ~~wherein the one or more predetermined factors include one or more of;~~

a number of nodes in the first path or the second path;

total available bandwidth for the first path or the second path;

available communications bandwidth on the first path or the second path;

propagation speed between nodes that make up the first path or the second path;

<u>or</u> ~~and~~

physical length of travel between nodes that make up ~~the up~~ the first path or the second path.

88.   (Currently Amended) The method of claim 4, <u>wherein one of the plurality of application sessions is an internet telephony session.</u> ~~further comprising:~~

~~displaying the first user community and the second user community;~~

~~displaying the plurality of physical paths between the first user community and the second user community.~~

89.   (Currently Amended) The ~~method~~ <u>machine-readable storage medium</u> of claim 24, <u>wherein one of the plurality of application sessions is an internet telephony session</u> ~~further comprising:~~

~~displaying the first user community and the second user community;~~

~~displaying the plurality of physical paths between the first user community and the second user community.~~

90.   (Currently Amended) The method of claim 76, <u>wherein one of the plurality of application sessions is an internet telephony session</u> ~~further comprising:~~

~~displaying the first group of terminals and the second group of terminals;~~

~~displaying the plurality of physical paths between the first group of terminals and the second group of terminals.~~

91.   (Canceled)

92.   (Currently Amended) The ~~method~~ machine-readable storage medium of claim 84, wherein each of the first and second sets of local applications includes an internet telephony application, and wherein each of the first and second sets of terminals includes at least one telephone device ~~further comprising:~~

~~displaying the first set of terminals and the second set of terminals;~~

~~displaying the plurality of physical paths between the first set of terminals and the second set of terminals.~~

93-97. (Canceled)

98.   (New) A machine-readable storage medium having stored thereon instructions that, if executed by a first media aggregation device within a network, cause the first media aggregation device to perform a method comprising:

receiving a request from a computer system to establish a single reservation protocol session between the first media aggregation device and a second media aggregation device within the network, wherein the request is received from a program running on the computer system that displays a projected link utilization illustrating predicted bandwidth usage for a plurality of routers along a first path of a plurality of paths between the first and second media aggregation devices, and wherein the program permits a user to select the projected link utilization in order to cause the reservation protocol session to be established;

in response to receiving the request, establishing the single reservation protocol session by reserving bandwidth from a plurality of routers along the first path; and

allocating the reserved bandwidth among a plurality of application sessions, each of which is between one of a first plurality of communication devices coupled to the first media aggregation device and one of a second plurality of communication devices coupled to the second media aggregation device.

99.   (New) The machine-readable storage medium of claim 98, wherein the established reservation protocol session is a resource reservation protocol (RSVP) session.

100.   (New) The machine-readable storage medium of claim 98, wherein said allocating includes:

        receiving a request for an amount of bandwidth from one of the plurality of application sessions; and

        in response to determining that the requested amount of bandwidth is available along the first path, allocating the requested amount of bandwidth to the application session.

101.   (New) The machine-readable storage medium of claim 98, wherein the program further permits a user to request that the established reservation protocol session be torn down after the reservation protocol session has been established, and wherein the method further comprises:

        receiving, from the program, an additional request to tear down the established reservation protocol session; and

        in response to receiving the additional request, tearing down the established reservation protocol session.

102.   (New) The machine-readable storage medium of claim 98, wherein one of the plurality of application sessions is an internet telephony session.

103.   (New) The machine-readable storage medium of claim 84, wherein the first and second network devices are configured to:

        receive requests from the first and second sets of local applications to communicate via the first path; and

        in response to the received requests, allocate the reserved bandwidth among the first and second sets of local applications.